

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034
B.Sc. DEGREE EXAMINATION – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY
SECOND SEMESTER – NOVEMBER 2015
PB 2504/2502/2500 - PTERIDO.,GYMNO., & PALEOBOTANY

Date : 04/09/2015
Time : 09:00-12:00

Dept. No.

Max. : 100 Marks

PART – A

[10 X 2 = 20]

ANSWER THE FOLLOWING, EACH WITHIN 50 WORDS ONLY

1. What is apogamy?
2. What is leptosporangiate type?
3. What is synangium.
4. Draw the morphology of maiden hair fern.
5. Write any four features of Bennettia tales.
6. Write about transfusion tissue.
7. What is spur shoot?
8. What is cupule?
9. What is impression?
10. Write a short note on *Rhynia*.

PART – B

[5 X 7 = 35]

ANSWER THE FOLLOWING, EACH ANSWER WITHIN 500 WORDS,
DRAW DIAGRAMS WHEREVER NECESSARY

11a. Give the general characters of Lycophyta.

(OR)

b. Write briefly about the origin of heterospory and seed habit in pteridophytes.

12a. Describe the structure of cone of *Equisetum*.

(OR)

b. Describe the sorus of *Adiantum*.

13a. Write the salient features of gnetales.

(OR)

b. Write about the general characters of Cordaitales.

14a. Write an account on the microsporophyll and megasporophyll of Cycas.

(OR)

b. Briefly summarise the economic importance of conifers.

15a. Describe the structure of *Lepidodendron*.

(OR)

b. Write an account on *Calamites*.

PART – C

(3 X 15 = 45)

ANSWER ANY THREE OF THE FOLLOWING, EACH WITHIN 1200 WORDS,
DRAW DIAGRAMS WHEREVER NECESSARY

16. Enumerate salient features of pteridophytes.

17. Describe the life cycle of *Marsilea*.

18. Explain the evolutionary tendency among Gymnosperms.

19. Compare the anatomy of stem of Pinus and Gnetum. Write about the Angiospermic affinities.

20. Write notes on : a) Petrification. b) *Williamsonia* c) Embedded fossil.

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